perature sensor (10) where the second time derivative is approximately 0 and to assign this new first derivative value to the variable α;

a recording medium and a computer-readable code means for directing the computer device to determine an amount value (Va) of a structure modifying agent to be added to the melt by using the first derivative value α and pre-recorded calibration data.

ABSTRACT

The present invention provides a possibility to evaluate cooling curves recorded in near-eutectic cast iron melts. The curves are evaluated by determining the net amount of heat generated in the melt in the centre of the sample to the melt as a function of time. This information is then used to identify the part of the centrally recorded cooling curve that can be used as a basis for determining the amount of structure-modifying agent that must be added to produce compacted graphite cast iron, and/or spheroidal graphite cast iron, and to identify the part of said curve that is associated with formation of primary austenite.

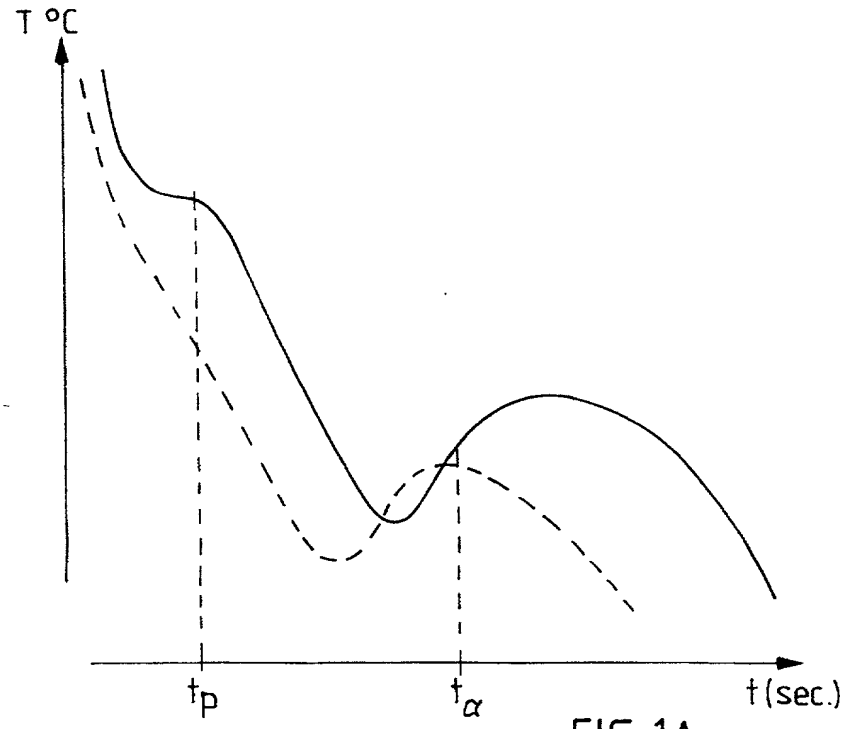

FIG. 1A

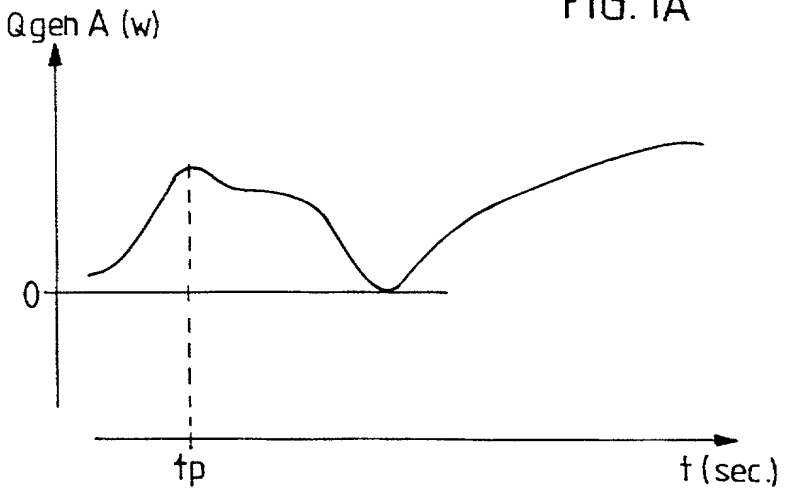

FIG. 1B